USS COLE (DDG 67) DAMAGE CONTROL EVENT TIMELINE

12 OCT 00 (ALL TIMES LOCAL -3C)

120849C - 121030C COLE MOORED ADEN, YEMEN (SIX MOORING LINES STBD SIDE TO BOW AND STERN LINE TO BUOY, SPRING LINE TO FUELING DOLPHINS, ANCHOR AT THE DIP), NO BROW TO DOLPHINS, SECURED 1B, 2A AND 2B GAS TURBINE MAIN ENGINES (GTMS), JACKING MAIN ENGINES; #1 AND #2 MAIN ENGINE LUBE OIL SYSTEMS IN OPERATION, #1 AND #2 FUEL SERVICE SYSTEMS IN OPERATION, #2 AND #3 SHIP SERVICE GAS TURBINE GENERATORS (SSGTG'S) IN PARALLEL, #2 AND #5 FIREPUMPS ONLINE, STEERING IN 5 MINUTE STANDBY (SYSTEM ALIGNED, PUMPS SECURED), PRESSURE (LP) AND HIGH PRESSURE (HP) AIR SYSTEMS ALIGNED FOR NORMAL OPERATIONS. RECEIVING POTABLE WATER AND SEWAGE DISPOSAL SERVICES FROM THE PIER. FIREMAIN/AQUEOUS FILM FORMING FOAM SYSTEM (AFFF) IN LOOP CONFIGURATION. MATERIAL CONDITION MODIFIED ZEBRA SET MAIN DECK AND BELOW. EQUIPMENT OUT OF COMMISSION (OOC); 1A GAS TURBINE ENGINE, 1A POWER TURBINE BRAKE, 1B REVERSE OSMOSIS (RO) UNIT AND ITS SALINITY SENSOR SYSTEM. WATCHES MANNED: CENTRAL CONTROL STATION (CCS) WATCH, INPORT EQUIPMENT MONITOR (IEM), SOUNDING AND SECURITY, FORWARD STARBOARD FUELING STATION AND FOUR FUEL OIL SPILL OVERBOARD WATCHES. PERSONNEL PREPARING TO PERFORM MAINTENANCE IN AUXILIARY MACHINERY ROOM (AMR) 1 ON #1 SSGTG REDUCTION GEAR AND IN MAIN ENGINE ROOM (MER) 1 ON 1A/1B RO UNITS. THREE PERSONNEL CONTROLLING FUELING IN OIL LAB.

- CCS WATCH WAS ELECTRICAL PLANT CONTROL CONSOLE (EPCC) OPERATOR QUALIFIED

121031C COMMENCED REFUELING

- SHIP HAD 37% F-76 FUEL ONBOARD AT START AND HAD TAKEN ON 80,000 GALLONS AT THE TIME OF THE EXPLOSION
- INITIALLY FILLING ALL SIX F-76 STORAGE TANK BANKS, ONE OF THE SIX HAD BEEN CLOSED OFF AT THE TIME OF THE EXPLOSION
- THE FUEL OIL TRANSFER SYSTEMS WERE NOT RUNNING
- REFUELING WAS BEING MANAGED FROM THE OIL LAB
- THE CHIEF ENGINEER (CHENG) HAD VERIFIED THE F-76 FUEL STORAGE AND TRANSFER SYSTEM ALIGNMENT PRIOR TO REFUELING.

121118C BLAST; #2 SSGTG SHUT DOWN; MER 1 (4-174-0-E) AND AMR 2 (4-220-0-E) WERE FLOODED

- #3SSGTG AND #3 SWITCHBOARD (SWBD) REMAINED ONLINE AND ENERGIZED
- THE FAULT CURRENT DETECTION SYSTEM ACTIVATED OPENING ALL BUS TIE BREAKERS. #1 AND #2 SWBDS WERE DEENERGIZED
- THE INTERNAL VOICE COMMUNICATIONS SYSTEM (IVCS) AND THE GENERAL ANNOUNCING SYSTEM (IMC) WERE LOST
- THE SHIP ACHIEVED AND MAINTAINED A 4 DEGREE PORT LIST IMMEDIATELY. THE SHIP WAS TRIMMED DOWN BY THE BOW AN UNDETERMINED AMOUNT.
- THE DATA MULTIPLEXING SYSTEM (DMS) BECAME UNRELIABLE AND STARTED UNCOMMANDED CYCLING OF FIREMAIN VALVES
- LOST AIR CONDITIONING (AC) AND THE CHILL WATER SYSTEM.
- LOST FIREMAIN PRESSURE DUE TO BLAST DAMAGE AND LEAKING/CYCLING FIREMAIN ISOLATION VALVES
- THERE WAS F-76 FUEL ACCUMULATION IN MER 1 (4-174-0-E), AMR 1 (4-126-0-E) AND AMR 2 (4-220-0-E).
- INSTALLED LIGHTING LOST FWD OF FRAME 220
- THE REPAIR 5 LOCKER (1-206-3A) WAS DAMAGED AND RENDERED UNUSABLE; HOWEVER, ALL DAMAGE CONTROL EQUIPMENT IN THE LOCKER WAS INTACT
- APPROXIMATELY 20 SELF CONTAINED BREATHING APPARATUS' (SCBAS) WERE DESTROYED
- CHENG SECURED ALL SYSTEMS IN MER 2 (4-254-0-E)
- SIX OF THE SHIP'S PORT SIDE LIFE RAFTS WERE BLOWN OVERBOARD
- THERE WAS NO POWER TO #1 AFFF STATION. SHIPWIDE AFFF SYSTEM LOST DUE TO LACK OF FIREMAIN
- THE WIRELESS INTERNAL COMMUNICATIONS SYSTEM (WICS) BECAME THE PRIMARY SHIP'S INTERIOR COMMUNICATION SYSTEM SUPPLEMENTED BY THE ENGINEERING ANNOUNCING CIRCUIT (25 MC)
 AND VARIOUS SOUND POWERED CASUALTY CIRCUITS (X5J)
- THERE WERE NO INITIAL FIRES. CHENG WAS INFOMED BY FEDERAL BUREAU OF INVESTIGATION BOMB EXPERTS THAT THE INITIAL BLAST BLEW OUT ANY CLASS ALPHA AND CLASS BRAVO FIRES
- ACTIONS BY THE CHAIN OF COMMAND:

EXECUTIVE OFFICER (XO) (BASED ON HIS VERBAL STATEMENT- EXACT TIMES UNAVAILABLE)

- THE XO WAS IN THE CREW RECREATION AND TRAINING ROOM (2-350-2-L) CONDUCTING A MORALE, WELFARE AND RECREATION COMMITTEE MEETING WITH THE AUXILIARIES OFFICER (AUXO) AND THE COMMAND MASTER CHIEF (CMC)
- THE XO PROCEEDED FROM THE CREW RECREATION AND TRAINING ROOM (2-350-2-L) FORWARD ON THE PORT SIDE UNTIL SMOKE STOPPED HIM. HE PROCEEDED AFT TO THE AFT BATTLE DRESSING STATION (2-410-1-L) AND ENCOUNTERED PERSONNEL FROM INSIDE/TOPSIDE. HE RESTORED ORDER AND ISSUED ORDERS TO:
 - GM2 LONG TO MAN THE AFT DECK GUN
 - MAN REPAIR LOCKER 3 (2-410-2-A)
 - SET MATERIAL CONDITION ZEBRA
 - ORDERED INVESTIGATORS TO MER 2 (4-254-0-E)
- THE XO ESTABLISHED INITIAL TRIAGE IN THE STARBOARD PASSAGE-WAY AFT OF THE MESS DECK (1 -220-5-L)
- HE PROCEEDED TO THE ENGINEERING CENTRAL CONTROL STATION (CCS) (1-268-0-C) VIA THE STARBOARD DAMAGE CONTROL DECK PASSAGE-WAYS
- GSMC DARWIN (LCPO FOR R AND MP DIVISION) WAS DOWN IN THE STARBOARD PASSAGE-WAY (1-220-5-L)
- THE XO SAW LOTS OF SMOKE, BUT COULD NOT DETERMINE IF THERE WAS A FIRE
- THE MEDICAL TREATMENT ROOM (SICK BAY) (1-220-3-L) INITIALLY WAS INACCESSIBLE DUE TO SMOKE
- THE XO ARRIVED IN CCS (1-268-0-C) AND TRIED TO ESTABLISH COMMUNICATION WITH THE BRIDGE

ENGINEER OFFICER (CHENG):

- WAS INITIALLY IN HER STATEROOM (02-126-1-L) IN FORWARD OFFICERS BERTHING
- SHE WAS UNABLE TO REACH CCS (1-168-0-C) VIA THE PORT SIDE WEATHERDECK
- SHE PROCEEDED TO THE BRIDGE (04-130-0-C) AND WAS ABLE TO DO A QUICK EXTERIOR DAMAGE ASSESSMENT.
- SHE RETURNED TO HER STATEROOM (02-126-1-L) AND DONNED A SCOTT EMERGENCY ESCAPE BREATHING DEVICE (EEBD)
- SHE PROCEEDED TO CCS (1-168-0-C) VIA THE STARBOARD DAMAGE CONTROL DECK PASSAGE-WAYS
- SHE MET THE XO IN CCS (1-168-0-C)
- THERE WAS A DIVISION OF LABOR WITH THE CHENG

CONTROLLING ENGINEERING ACTIONS AND THE XO CONTROLLING DAMAGE CONTROL EFFORTS

COMMANDING OFFICER (CO):

- WAS INITIALLY IN HIS CABIN (02-146-1-L)
- ARMED HIMSELF WITH HIS PERSONAL 9-MM PISTOL, DONNED A FLACK JACKET AND WENT TO THE BRIDGE (04-130-0-C)
- RECEIVED A BRIEF FROM THE XO VIA WICS ON SHIP'S DAMAGE
- HE ORDERED TOPSIDE ACCESS SECURED AS A FORCE PROTECTION MEASURE
- HE SAW WHAT A APPEARED TO BE 4-6 BLACK RUBBER BOATS IN THE WATER AND ASSUMED THEY WERE A THREAT TO THE SHIP
- HE RAPIDLY DETERMINED THEY WERE SHIP'S LIFE RAFTS THAT HAD BEEN BLOWN OVER THE SIDE, HAD DEPLOYED FROM THEIR STORAGE CANISTERS AND WERE FLOATING UPSIDE DOWN.
- HE CONTACTED HARBOR AUTHORITIES VIA A HAND HELD MARINE (BRIDGE TO BRIDGE) RADIO TO REPORT THE INCIDENT AND REQUEST ASSISTANCE
- AS THE SHIP WAS UNABLE TO ESTABLISH LONG RANGE COMMUNICATION TO REPORT THE INCIDENT AND REQUEST HELP THE CO ORDERED TWO EMERGENCY POSITION INDICATING RADIO BEACONS (EPIRB) TOSSED INTO THE WATER.

DAMAGE CONTROL ASSISTANT (DCA):

- PROCEEDED FROM THE FILTER CLEANING SHOP (01-188-2-Q) TO THE WEATHER DECK ON THE PORT SIDE THROUGH THE PORT AIRLOCK (01-178-2-L)
- USING THE PORT SIDE WEATHER DECK HE PROCEEDED AFT, REENTERED THE INTERIOR OF THE SHIP THROUGH THE AFT AIRLOCK (1-366-3-L) AND TO PROCEEDED TO CCS (1-268-0-C) VIA STARBOARD DAMAGE CONTROL DECK PASSAGEWAYS.
- THE DCA ARRIVED IN CCS (1-268-0-C) WITHIN 3 TO 4 MINUTES OF THE XO.
- HE STARTED TO RECEIVE VERBAL REPORTS FROM AD HOC INVESTIGATORS RIGHT AWAY.
- THE DCA ESTABLISHED COMMUNICATION WITH REPAIR LOCKER 3 VIA THE DAMAGE CONTROL WIRE FREE COMMUNICATIONS SYSTEM (DC WIFCOM)
- THE XO DIRECTED THE DCA TO GET INVESTIGATORS OUT
- WITHIN 10 TO 15 MINUTES OF THE BLAST THE CREW WAS MANNING THEIR ASSIGNED GENERAL QUARTERS

STATIONS

- REPAIR LOCKER 5 PERSONNEL BEGAN PASSING GEAR FROM THE REPAIR 5 LOCKER (1-206-3-A) AND THEN REPORTED TO REPAIR LOCKERS 2 (1-97-1-A) AND 3 (2-410-2-A).
- SMOKE DISSIPATED RAPIDLY THROUGH THE HOLE IN THE SIDE OF THE SHIP
- INITIAL TRIAGE WAS ESTABLISHED IN THE ENGINEERING DEPARTMENT OFFICE (1-258-3-Q) AND THE STARBOARD QUARTERDECK.

INVESTIGATOR REPORTS:

- THE REFRIGERATION MACHINERY ROOM (2-240-1-E), THE PULPER/SHREDDER RM (2-240-6-Q), THE DRY PROVISIONS STOREROOM (2-220-4-A), THE PROVISIONS ISSUE ROOM (2-220-A), THE SNAP II COMPUTER ROOM (2-240-2-Q), THE DEGAUSSING POWER ROOM (2-240-0-Q, THE CHILL STOREROOM (2-238-1-A), AND THE FREEZE STOREROOM (2-220-3-A) WERE FLOODING THROUGH THE SUPPLY DEPARTMENT STOREROOM (3-220-01-A) AND THE SUPPLY SUPPORT CENTER (3-220-2-Q) INTO AMR 2 (4-220-0-E) (THE SOURCE OF FLOODING WAS NOT DETERMINED).
- THERE WAS INITIALLY FUEL IN MAIN ENGINE ROOM (MER) 1 (4-174-0-E), AMR 2 (4-220-0-E), AND FUEL WAS GOING OVER SIDE THROUGH THE HOLE IN THE HULL CAUSED BY THE BLAST
- REPAIR LOCKER PERSONNEL STARTED DUMPING FIVE GALLONS CANS OF AFFF INTO MER 1 (4-174-0-E) (VIA NATURAL VENTILATION SHAFT) AND AMR 2 (VIA THE MAIN HATCH)
- RIGGED P-100s TO DEWATER AMR 1 (4-126-0-E) AND AMR 2 (4-220-0-E)
- MONITORING FLOODING IN AMR 2 (4-220-0-E) VIA ESCAPE TRUNK (4-220-2-T)
- WATER WAS FLOODING INTO AMR 1 (4-126-0-E) VIA DAMAGED BLEED AIR PIPING AND STUFFING TUBES
- SHIP'S FORCE COULD NOT INITIALLY DETERMINE THE EXTENT OF DAMAGE TO #1 SWBD
- THERE WAS AN INITIAL REPORT OF CLASS CHARLIE FIRES IN THE LAUNDRY (2-414-0-Q) AND THE CREW/CPO GALLEY (1-191-0-L)
- FIREMAIN AFT STBD SECTION (FRAME 220 AFT TO FRAME 408) WAS RESTORED (BLAST PLUS 1 TO 1 AND 1/2 HOURS)

MEDICAL/TRIAGE

- WAS ESTABLISHED ON THE FLIGHT DECK AND THE STARBOARD OUARTERDECK
- THE CPO MESS ROOM AND LOUNGE (1-174-0-L) WAS HEAVILY DAMAGED, MUCH OF THE SENIOR ENLISTED LEADERSHIP WAS MISSING
- EMERGENCY/BOTTLED WATER SUPPLIES WERE BROKEN OUT
- HEAT STRESS STARTED TO BECOME A FACTOR AT THIS POINT
- SHIP'S FORCE SCOOPED ICE FROM WARDROOM GALLEY (02-158-4-L) ICE MACHINE TO MELT DOWN FOR ADDITIONAL WATER
 - GATORADE WAS BROKEN OUT FROM THE SHIP'S STORE SUPPLIES (TO SUPPLEMENT WATER SUPPLIES)
 - EVACUATION ARRANGED VIA THE DEFENSE ATTACHE REPRESENTATIVE

121427C #3 SWBD WAS ELECTRICALLY ISOLATED (MANUALLY) FROM MER 1 (4-174-0-E) AND AMR 2 (4-220-0-E)

- ISOLATION LISTS WERE USED AND CONFIRMED TO BE CORRECT

121456C STARTED #4 FIREPUMP

121500C CREW MUSTER WAS COMPLETED

121530C COMMENCED RIGGING CASUALTY POWER FROM #3 SWBD TO RADIO TRANSMITTER ROOM (2-158-1C) (VIA THE STARBOARD DAMAGE CONTROL DECKPASSAGE-WAYS) TO PROVIDE POWER FOR OFF-SHIP COMMUNICATIONS

- THE FLIGHT DECK WAS ESTABLISHED AS AN AD HOC MESSING AND BERTHING AREA
- SECURITY LIGHTING WAS RIGGED TOPSIDE POWERED BY EXTENSION CORDS FROM OULETS AFT ON THE WEATHER DECKS
- 121825C THE STARBOARD SHAFT BULKHEAD SEAL IN MER 2 (4-254-0-E) GAVE WAY
- 121826C ALIGNED MER 2 (4-254-0-E) MAIN DRAIN EDUCTOR TO DEWATER THE SPACE
- 121829C CONTROLLED MER 2 (4-254-0-E) STARBOARD SHAFT SEAL LEAK WITH OAKUM AND WEDGES.
- 121829C COMMENCED DEWATERING AMR 1 (4-126-0-E) USING P-

100 PORTABLE DEWATERING PUMPS

- ENTERED SHIP'S STORE AND DISTRIBUTED SNACKS FOR THE EVENING MEAL.
- SHIP'S FORCE DISCOVERED THEY WERE UNABLE TO DEWATER MER 2 USING THE MAIN DRAIN EDUCTOR (PROBLEM WAS FOUND TO BE FIREMAIN VALVE V-769 WAS CLOSED).
- RESTORATION WATCH BILL SET.

122213C STARTED #2 LOW PRESSURE AIR COMPRESSOR

122231C BLOW-IN DOORS OPENED ON #3 SSGTG, IMMEDIATELY RECLOSED.

- REMAINS OF DINNER WAS ON FLIGHT DECK.
- CHENG WAS CONCERNED ABOUT FODDING GTG AND ORDERED ALL TRASH CLEARED AWAY IMMEDIATELY.
- THE LUBE OIL FILTERS BECAME CLOGGED ON #3 SSGTG.
 THE FILTERS WERE SHIFTED AND THE OFFLINE FILTER
 WAS REPLACED WITH A FILTER FROM #1 SSGTG.
 SHIP'S FORCE STATED THEY SUSPECTED ENGINE
 MISALIGNMENT.
- THE FILTER CLOGGED AGAIN AND BOTH FILTERS WERE REMOVED.

122304C STARTED #2 GTG FOR OP TEST

122307C STOPPED #2 GTG OP TEST SAT

122320C STARTED #2A FUEL OIL SERVICE PUMP (FOSP) FOR OPERATIONAL TEST

122339C STOPPED #2A FOSP OPERATIONAL TEST. IT WAS SATISFACTORY.

13 OCT 00

130000C (SUMMARY) MER 1 (4-174-0-E) IS FLOODED,

AMR 1 (4-126-0-E) HAS MINOR FLOODING VIA BLEED

AIR PIPING, AMR 2 (4-220-0-E) IS FLOODED WITH

DEWATERING IN PROGRESS, MER 2 (4-254-0-E)

HAD CONTROLLABLE FLOODING FROM THE STARBOARD

SHAFT BULKHEAD SEAL, THE SEAL WAS PLUGGED AND

LEAKS HAVE SLOWED TO A TRICKLE. MACHINERY ONLINE:

#3 SSGTG, 4 AND 5 FIREPUMPS, #2 LOW PRESSURE AIR

COMPRESSOR. DRAFT AND LIQUID LOAD FIGURES WERE

NOT DETERMINED. SHIP'S FORCE WAS UNABLE TO READ

THE FORWARD DRAFT MARKS AS WATER LINE IS HIGHER THAN MARKS AND DID NOT ESTIMATE THE DRAFT FORWARD.

- 130018C CLOSED 3S-2S BUS TIE BREAKER (BTB)
- 130019C CLOSED 2S-3S BTB
- 130756C STARTED #2 HIGH PRESSURE AIR COMPRESSOR,
 COMMENCED TAG-OUT FOR DIVERS
- 131041C RIGGED CASUALTY POWER TO FORWARD PORTION OF SHIP,

SAT OP TEST ON 1MC

- SHIP'S INSTALLED LIGHTING WAS RESTORED FORWARD OF FRAME 174.
- RIGGED TEMPORARY LIGHTING IN PASSAGE-WAYS BETWEEN FRAMES 174 AND 220 USING EXTENSION CORDS FROM ENERGIZED OUTLETS AFT.
- 131040C SECURED MER 2 (4-254-0-E) EDUCTOR
- 131043C SECURED AMR 1 (4-126-0-E) EDUCTOR
- 131118C RIGGED CASUALTY POWER TO #5 SEA WATER SERVICE (SWS) PUMP,
 STARTED #5 SWS PUMP
- 131215C STARTED #4 CHILL WATER PUMP
- 131218C STARTED #4 AIR CONDITIONING UNIT
 - RESTORED AIR CONDITIONING AFT. SET AIR CONDITIONING BOUNDARIES USING SMOKE CONTROL CURTAINS.
 - COMMENCED ISOLATING GROUNDS FROM #1 SWBD. PRIOR TO STARTING EQUIPMENT RESTORATION IN THE FORWARD PART OF THE SHIP.
 - RESTORED POTABLE WATER SERVICE AND CHT AFT.

14 OCT 00

140000C (SUMMARY) MER 1 (4-174-0-E) IS FLOODED,
AMR 1 (4-126-0-E) HAS MINOR FLOODING VIA BLEED
AIR PIPING, AMR 2 (4-220-0-E) IS FLOODED WITH
DEWATERING IN PROGRESS, MER 2 (4-254-0-E)
STARBOARD SHAFT BULKHEAD SEAL HAS STOPPED
LEAKING, MACHINERY ONLINE: #3 SSGTG, 4 AND 6

FIREPUMPS, #2 LOW PRESSURE AIR COMPRESSOR. #4 AND #5 SWS PUMPS, #4 AIR CONDITIONING UNIT, #4 CHILL WATER PUMP. DRAFT AND LIQUID LOAD FIGURES WERE NOT DETERMINED. SHIP'S FORCE WAS UNABLE TO READ THE FORWARD DRAFT MARKS AS WATER LINE IS HIGHER THAN MARKS AND DID NOT ESTIMATE THE DRAFT FORWARD.

- 141032C STARTED #2 HPAC
 - MDUSU2 MASTER DIVER ARRIVED.
- 141548C TAGGED AUTOMATIC BUS TRANSFER (ABT) 3-261-1 OUT OF SERVICE AFTER DISCOVERING FUEL INSIDE THE ABT
 - USS DONALD COOK (DDG 75) AND USS HAWES (FFG 53) ARRIVED IN ADEN HARBOR.
- 141637C CLEARED TAGS ON ABT 3-261-1, REPAIRS COMPLETE
- 141931C ENGERIZED CASUALTY POWER FROM #3 SWBD TO LC-11
- 141932C #4 AC TRIPPED OFF LINE DUE TO LOW CHILL WATER LEVEL IN EXPANSION TANK
- 142049C RE-STARTED #4 AC
- 142100C WATER LEVEL IN AMR 2 BEGAN TO INCREASE

15 OCT 00

150000C (SUMMARY) MER 1 (4-174-0-E) IS FLOODED, AMR 1 (4-126-0-E) HAS MINOR FLOODING VIA BLEED AIR PIPING, AMR 2 (4-220-0-E) IS PARTIALLY DEWATERED WITH CONTINUED DEWATERING IN PROGRESS, MER 2 (4-254-0-E) SHAFT BULKHEAD SEAL HAS STOPPED LEAKING. MACHINERY ONLINE: #3 SSGTG, #4 AND #6 FIREPUMPS, #4 AND #5 SWS PUMPS, #4 AIR CONDITIONING UNIT, #4 CHILL WATER PUMP, #2 LOW PRESSURE AIR COMPRESSOR. DRAFT AND LIQUID LOAD FIGURES WERE NOT DETERMINED. SHIP'S FORCE WAS UNABLE TO READ THE FORWARD DRAFT MARKS AS WATER LINE IS HIGHER THAN MARKS AND DID NOT ESTIMATE THE DRAFT FORWARD.

150100C CREWMEMBERS STATED THEY HEARD A SOUND OF

SOMETHING GIVING WAY-"A SWOOSHING SOUND"

- 150115C MER 2 REPORTS SHAFT BULKHEAD SEAL LEAKING APPROXIMATELY 5 GALLONS PER MINUTE
- 150130C MER 2 REPORTS FLOODING HAS INCREASED TO 15 GALLONS PER MINUTE
- 150136C MER 2 EDUCTOR WAS STARTED
- 150137C CO ORDERED REPAIR LOCKERS TWO AND THREE REMANNED
- 150140C STARTED #5 FIREPUMP
- 150237C SOURCE UNDETERMINED FOR AMR 2 FLOODING
 LEVEL OF WATER IN ESCAPE TRUNK RISES 6 FEET,
 ALIGNED AMR 1 MAIN DRAIN EDUCTOR
 ADDED TWO ADDITIONAL PERI-JET EDUCTORS VIA
 THE MAIN HATCH
- 150247C SECURED AMR 1 EDUCTOR
- 150305C #3 SSGTG STOPPED (RAN OUT OF FUEL)
- 150307C ATTEMPTED TO START #2 SSGTG. UNABLE TO START DUE TO DEAD SWITCHBOARD BATTERIES. (BASED ON CHENG STATEMENT)
- 150309C CONDUCTED A 30 SECOND MOTOR OF #3 SSGTG
- 150311C ATTEMPTED HIGH PRESSURE AIR START #3 SSGTG, #3 SSGTG FAILED TO START DUE TO INSUFFICIENT HIGH PRESSURE AIR PRESSURE/VOLUME

(FOLLOWING BASED ON CHENG LATE LOG ENTRY NARRATIVE, NO TIMES AVAILABLE)

- INCREASED PRESSURE ON AMR 2'S BLKHD STARTED PUSHING THE SHORING OUT OF MER 2 TO SHAFT BLKHD SEAL.
- RIGGED SHORE FIREMAIN WITH PERI-JET EDUCATOR, ATTEMPTED TO PROVIDE SHIP'S FIREMAIN BY SUPPLYING SHORE FIREMAIN VIA SHORE FIREMAIN RISER. UNABLE TO PROVIDE SUFFICIENT FIREMAIN PRESSURE FOR DEWATERING.
- SHIP'S FORCE ATTEMPTED TO RIG TWO P-100 PUMPS IN TANDEM, BUT DID NOT HAVE THREE-INCH TO TWO AND 1/2 INCH COUPLING TO MAKE IT WORK.

- SHIP'S FORCE RIGGED PERI-JET EDUCTOR IN TANDEM WITH P-100 PUMP IN MER 2 WHICH COULD NOT PROVIDE SUFFICIENT SUCTION HEAD.
- SHIP'S FORCE REMOVED AN OVERBOARD VALVE ON THE UPPER LEVEL OF MER 2 BUT (BASED ON CHENG VERBAL STATEMENT) IT STARTED TO FLOOD INTO THE SHIP AND WAS REPLACED.
- USED THE PORTABLE EXOTHERMIC CUTTING UNIT TO GUT A HOLE IN THE HULL IN MER 2 UPPER LEVEL FOR DICHARGE OF P-100 PUMPS.
- SHIP'S FORCE RIGGED TWO AIR OPERATING RECIPORICATING PUMPS OBTAINED FROM USS HAWES, UTILIZING LP-AIR FROM SHORE.
- DEWATERING OF MER 2 (4-254-0-E) WAS COMPLETE APPROXIMATELY 1600.
- SHIP'S FORCE RIGGED TWO PORTABLE SCBA DIESEL COMPRESSORS TO FILL THE #3 SSGTG HIGH PRESSURE AIR FLASKS. BASED ON CHENG VERBAL COMMENTS, FLASKS WERE REFILLED VIA THEIR GAGE LINES USING FITTING SUPPLIED BY THE MDSU 2 DIVERS.
- BASED ON INTERVIEWS WITH THE CHENG AND EMC NEWTON 5TH FLEET PROVIDED TWO PORTABLE DIESEL GENERATORS THAT COULD NOT BE USED INITIALLY BECAUSE OF THEIR MATERIAL CONDITION. AFTER REPAIR BY SHIP'S FORCE, THEIR SMALL CAPACITY (ONE WAS 30 KILOWATTS AND THE OTHER WAS 40 KILOWATTS) PREVENTED THEM FROM BEING UTILIZED.

16 OCT 00

160000C (SUMMARY) MER 1 (4-174-0-E) IS FLOODED, AMR 1 (4-126-0-E) HAS MINOR FLOODING, AMR 2 (4-220-0-E) IS FLOODED, MER 2 (4-254-0-E) HAS MINOR FLOODING FROM FORWARD BULKHEAD. DRAFT AND LIQUID LOAD FIGURES WERE NOT DETERMINED. SHIP'S FORCE WAS UNABLE TO READ THE FORWARD DRAFT MARKS AS WATER LINE IS HIGHER THAN MARKS AND DID NOT ESTIMATE THE DRAFT FORWARD. THERE WAS NO POWER AND NO INSTALLED EQUIPMENT WAS RUNNING.

160005C STARTED #3 SSGTG

160009C STARTED #6 FIREPUMP

160018C SECURED RECEIVING FIREMAIN FROM SHORE

160028C STARTED #5 FIREPUMP

- 160032C ENERGIZED CASUALTY POWER FROM #3 SWBD FEEDING LC-11
- 160041C FORWARD AND AFT CHEMICAL HOLDING TANK (CHT) SYSTEMS ONLINE
- 160045C STARTED #3 LPAC
- 160047C #3 LPAC SHUT DOWN DUE TO LOSS OF POWER
- 160048C STARTED #5 SWS PUMP
- 160053C STARTED #2 LPAC, SUMMARY FAULT IMMEDIATELY INDICATED
- 160100C ENERGIZED PP4-295-1 (POWER FOR #2 HIGH PRESSURE AIR COMPRESSOR (HPAC))
- 160101C STARTED #2 LPAC PLACED IN "LEAD" MODE (LEAD
- 160103C STARTED #3 LPAC AND PLACED IN "LAG" MODE
- 160104C STARTED #2 HPAC
- 160112C STARTED 2A AND 2B GAS TURBINE MODULE (GTM)
 COOLING FANS (REASON UNDETERMINED)
- 160118C 2A AND 2B GTM COOLING FANS STOPPED DUE TO A GROUND BEING DETECTED
- 160133C STARTED #4 AIR CONDITIONING UNIT
 START OF ANY CHILL WATER PUMP NOT LOGGED
- 160445C ALIGNED AMR 1 (4-126-0-E) EDUCTOR
- 161105C #2 SWBD ENERGIZED
- 161129C STARTED #2A FOSP FOR OPERATIONAL TEST
- 161149C STOPPED #2A FOSP OPERATIONAL TEST SATISFACTORY
- 161325C STARTED #2A FOSP
- 161424C #3 SSGTG SHUT DOWN DUE TO UNDER VOLTAGE
 BASED ON CHENG LATE LOG ENTRY, #3 SSGTG SHUT
 DOWN DUE TO FUEL GRAVITY FEED TANK
 (FGFT) LEVELS NOT BEING MONITORED. CHENG

STATES WILL NOW USE MER 2 FUEL OIL SERVICE SYSTEM TO PROVIDE FUEL TO #3 SSGTG

161500C STARTED #3 GTG

161501C STARTED #5 FIREPUMP

161502C STARTED #4 FIREPUMP

161507C STARTED #2B FOSP

161516C STARTED #4 AIR CONDITIONING UNIT
- START OF ANY CHILL WATER PUMP NOT LOGGED

161910C STARTED #2 SSGTG LOCALLY

161916C SECURED #2 SSGTG DUE TO "HIGH MODULE TEMPERATURE" ALARM

- BASED ON CHENG VERBAL STATEMENT 5TH AND 10TH STAGE BLEED AIR VALVES DID NOT CLOSE AUTOMATICALLY AS REQUIRED DUE TO FAILURE OF THE 3-WAY VALVE

162011C STARTED #4 SWS PUMP

17 OCT 00

170000C (SUMMARY) MER 1 (4-174-0-E) IS FLOODED, AMR 1 (4-126-0-E) HAS MINOR FLOODING, AMR 2 (4-220-0 -E) IS FLOODED, MER 2 (4-254-0-E) HAS MINOR FLOODING FROM FORWARD BULKHEAD. EQUIPMENT ONLINE AS FOLLOWS: #3 GTG, #4 AND #5 FIREPUMPS, #4 AND #5 SWS PUMPS, #4 AIR CONDITIONING UNIT, #2 LPAC, #2 HPAC, #2B FOSP

171000C CONDUCTED GTGI ON #2 SSGTG

171016C MOTORED #2 SSGTG TO TROUBLE SHOOT BLEED AIR PROBLEMS

171019C ATTEMPTED TO START #2 SSGTG

171020C #2 GTG FAILED TO START (EXCEEDED 90 SECOND SLOW START TIMER)

171026C ATTEMPTED TO START #2 SSGTG (FAILED TO START

DUE TO EXCEEDING 90 SECOND SLOW START TIMER)

- 171025C JP-5 PIER REFUELING ALIGNMENT VERIFIED BY CHENG
- 171055C COMMENCED RECEIVING JP-5
- 171105C VENTILATION RESTORED AMR 1 (4-126-0-E), NO GROUNDS
- 171112C GROUND IN AFT AFFF STATION
- 171120C MOTORED #2 SSGTG TO TROUBLE SHOOT BLEED AIR PROBLEMS
- 171158C ATTEMPTED TO START #2 SSGTG
- 171159C #2 SSGTG FAILED TO START DUE TO INSUFFICIENT FUEL MANIFOLD PRESSURE
- 171315C GROUND CLEARED IN AFT AFFF STATION
- 171325C ALIGNED MER 2 (4-254-0-E) MAIN DRAIN EDUCTOR
- 171335C GROUND IN AFT AFFF STATION, GROUND CLEARED
- 171520C MOTORED #2 SSGTG
- 171525C MOTORED #2 SSGTG
- 171717C ATTEMPTED TO START #2 SSGTG, STOP INITIATED

 BASED ON CHENG COMMENTS IN LATE ENTRY, #2

 SSGTG WOULD NOT START DUE TO FAILURE OF THE
 FUEL MANIFOLD DRAIN VALVES TO CLOSE AT THE
 APPROPRIATE TIME DURING THE START SEQUENCE
- 171926C MOTORED #2 SSGTG
- 171942C INITIATED TAG-OUT OF BATTLE DAMAGED EQUIPMENT